

ABILITY GROUPS

ineffective or ineffectively used?

All teachers are aware of the wide range of abilities that exist within most standard Australian primary school classrooms. Many of these schools implement structures such as ability grouping and/or streaming to help meet the needs of this diverse group of learners; but does ability grouping meet these needs? The number of studies that have looked at the pros and cons of ability grouping is overwhelming, and they conclusively prove one thing, that the research is inconclusive (Loveless, 1998).

Working as a student services officer (SSO) teaching mathematics to small ability groups has prompted me to consider my own perspectives on this topic, and more importantly to consider how I can make this type instruction more effective. The following article looks at the justification for maintaining small ability groups and the implications to achieving success.

Why are ability groups important in mathematics teaching?

The case for ability grouping has more relevance in the area of mathematics than other learning areas because of the huge range of abilities that often occur within the same class. The hierarchical nature of maths requires that grounding concepts be learnt before the mathematical processes can be continued (Harlen, 1999).

For many students, understanding the first step in a new mathematical area may be a major stumbling block, whereas other students may grasp key mathematical concepts immediately and are eager to continue. The difference between success and failure for some students may be the lack of

new VOICES



SIMON SCHOLZ

**offers his perspective
on a long-standing debate.
Is there justification for the
use of ability groups
within primary schools?**

opportunity to develop the necessary conceptual foundation in an environment that is understanding and non-judgmental. This is where the use of an ability group that moves at a pace more suited to the capabilities and level of understanding of students, has potential benefits over an inclusive setting.

'Look at each others results and try to work out why there is a difference between the answers.' This was the suggestion I made to students in a low ability group while they were calculating the areas within a house floor plan. This request created some lively discussion amongst the students, who were progressing at similar rates and achieving comparable successes. This type of discussion and questioning between like-minded peers creates a community of learning, and helps increase understanding.

Further, teachers of mathematics have an essential responsibility for teaching students many of the skills that they will require in everyday life. These skills must be taught effectively in whichever setting provides the most suitable learning experiences, whether it is an inclusive setting or a more concentrated environment. A small group setting allows important concepts to be taught and assessed more readily. An analogy of this could be a tennis player who needs extra attention on their serve to improve their overall game. Serving in this case is the life skill, as each player must be able to serve to play tennis. This instruction would be more effective if given in a small group rather than to 20 or 30 players at a time. The point I'm making here, is that an inclusive classroom may prove to be more effective overall, however there will always be students for whatever reason, who require an alternative form of tuition in order to succeed in reaching their potential.

How to achieve success using ability groups

In his article, *The Case Against*, Coombes (1999) states that ability grouping has a tendency to perpetuate educational disadvantage through teacher expectancy, which can remain with students throughout their schooling. I'm certainly not disputing this claim, and I think that it is a concern all educators should be aware of. However, rather than looking at the reasons why ability grouping is ineffective, I will now consider the factors that may lead to it becoming an effective pedagogy.

Sharon Freeman (2003), the coordinator for the Students with High Intellectual Potential (SHIP) program at an Adelaide primary school, suggests that teachers may be holding back high achieving students. She believes that the biggest key to success for ability groups is choosing the correct teacher, and that teachers have the potential to increase the effectiveness for ability groups in various ways. Freeman (2003) believes it goes further than having a sound knowledge of the mathematical content, and states that teachers of ability groups must be aware of each student's ability while trying to foster self esteem, as well as maintaining high expectations. This allows students to experience hard earned success and take pride in their mathematics achievements.

The environment is another important consideration for ability groups, which must be relaxed and non-threatening, where students are able to share ideas freely. Students should be able to experience genuine feelings of achievement that come from teachers providing problems that are challenging and that have real life connections. An example of this was an activity I developed over several lessons with a group of students on data and graphing. The scenario I set for the students was that the school canteen committee was keen to establish the spending habits of the various year levels within the school. Working in pairs, the students were first required to collect data using a questionnaire that indicated the frequency of canteen usage by the students in different classes. The benefit of having a small ability group for this activity was the rich discovery that took place throughout the learning experiences. For example, the data collected from the reception children was inconclusive because they didn't understand the questions being asked of them. This was something we hadn't anticipated as a group, so we then discussed ways to improve the clarity of our questions for younger children. Each member of the group was able to make a contribution and was respected for their opinions.

Another consideration for making ability groups more effective is the philosophy behind them. Ability groups are



often seen as a more convenient method of teaching, because the teacher is able aim their lessons at the middle range of students without being concerned about the lower and higher abilities. However, rather than establishing generic groups for mathematics, these groups would be more effective with short-term instruction designed to help students who are experiencing difficulties, or who require extension in a particular area. In these groups students could develop the grounding, confidence and self esteem to make worthwhile contributions upon returning to the whole class. These groups should not be limited to the same high and low achieving students but reflect the individual, and be seen as interchangeable, while acknowledging the diversity in class populations.

Conclusion

It is no coincidence that the factors I have discussed in achieving successful ability grouping are synonymous with current beliefs in effective education. The fact is, that for a myriad of reasons there will always be students at various levels of achievement and ability in mathematics. So to cater for this diversity in learning, there should also be a variety of teaching methods. While streaming whole classes, for many, is seen as an inequitable method of instruction, I still believe there is a strong case for the provision of small ability based groups.

The success of using ability groups largely depends on a range of considerations, but most importantly hinges on the philosophy behind their use, and the manner in which they're implemented. To achieve success and provide equity in ability groups, they should be seen as an opportunity to provide more concentrated tuition by an experienced teacher. The outcome for these groups should be for students to

receive tuition that allows them to maximise their learning potential and to participate and share in an inclusive classroom environment. An impediment to achieving this outcome may be a lack of suitably qualified mathematics staff adept at addressing the different ends of mathematics achievement. This could be addressed by the professional development of one specialist educator in the area of mathematics within each school. This teacher could then facilitate training sessions for all staff members designed to increase mathematics instruction and to maximise the benefits from ability grouping.

In a 'perfect world', an inclusive classroom that was equitable for all students and which suited all learning styles would be the ideal solution. Until that time, I recommend we maintain a range of effective, and up-to-date strategies that capitalise on students' learning potential.

References

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